UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

12/10/2004

Schwegman, Lundberg, Woessner & Kluth, P.A. Attn: David R. Cochran P.O. Box 2938
Minneapolis, MN 55402

EXAMINER

SARKAR, ASOK K

PAPER NUMBER

ART UNIT

DATE MAILED: 12/10/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602.315	06/24/2003	Kie Y. Ahn	1303.107US1	9051

TITLE OF INVENTION: LANTHANIDE OXIDE / HAFNIUM OXIDE DIELECTRICS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	nonprovisional NO		\$300	\$1700	03/10/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATEN <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHT THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPO PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM TH MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THE STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOV REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (O AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WIL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is n claiming SMALL ENTITY status, check box 5a on Part B - Fee Transmittal and pay the PUBLICATION FEE (if required) and 1 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) w your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks I through 5 should be completed wh appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address

indicated unless corrected maintenance fee notification	below or directed otherwise	in Block 1, by (a)	specifying a new co	rrespondence addres	ss; and/or (b) indicating a sepa	arate "FEE ADDRESS"	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 7590 12/10/2004				Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, m have its own certificate of mailing or transmission.			
Schwegman, Lundberg, Woessner & Kluth, P.A. Attn: David R. Cochran P.O. Box 2938 Minneapolis, MN 55402				C	ertificate of Mailing or Trans this Fee(s) Transmittal is bein with sufficient postage for fir ail Stop ISSUE FEE address SPTO (703) 746-4000, on the co	smission	
William Cupons, Will	33 102					(Depositor's na	
						(Signat	
						(D	
APPLICATION NO.	FILING DATE	F	FIRST NAMED INVEN	OR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/602,315	06/24/2003		Kie Y. Ahn		1303.107US1	9051	
	ANTHANIDE OXIDE / HA						
APPLN. TYPE	SMALL ENTITY	ISSUE FE	EE PU	BLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1400		\$300	\$1700	03/10/2005	
EXAM	MINER	ART UNI	T CL	ASS-SUBCLASS			
SARKAR	R, ASOK K	2829		438-240000			
CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)							
(A) NAME OF ASSIGN	IEE	(B)) RESIDENCE: (CITY	and STATE OR Co	OUNTRY)		
4a. The following fee(s) are	e assignee category or catego		nted on the patent): Payment of Fee(s):	☐ Individual ☐	Corporation or other private gro	oup entity Governm	
☐ Issue Fee	One loss di		A check in the am	ount of the fee(s) is	enclosed.		
Publication Fee (No small entity discount permitted)				redit card. Form PTO-2038 is attached.			
Advance Order - # o	f Copies		The Director is h Deposit Account Num	ereby authorized by aber	charge the required fee(s), or (enclose an extra c	credit any overpayment opy of this form).	
	(from status indicated above	,	☐ b. Applicant is no	longer claiming SM	ALL ENTITY status. See 37 C	FR 1.27(g)(2).	
The Director of the USPTO NOTE: The Issue Fee and P interest as shown by the rec	is requested to apply the Issue Publication Fee (if required) words of the United States Pate	ue Fee and Publicate will not be accepted ent and Trademark (ion Fee (if any) or to r from anyone other th Office.	e-apply any previou an the applicant; a re	(Depositor's na (Signat (D ATTORNEY DOCKET NO. CONFIRMATION NO. 1303.107US1 9051 TOTAL FEE(S) DUE DATE DUE 0 \$1700 03/10/2005 BCLASS 0000 It front page, list egistered patent attorneys 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Authorized Signature				Date			
Typed or printed name _				Registratio	on No.		
This collection of information an application. Confidential submitting the completed at this form and/or suggestion.	on is required by 37 CFR 1.3 ity is governed by 35 U.S.C. pplication form to the USPT s for reducing this burden, sl	11. The information 122 and 37 CFR 1 O. Time will vary outline sent to the	n is required to obtain .14. This collection is depending upon the in Chief Information Of	or retain a benefit by estimated to take 12 adividual case. Any ficer, U.S. Patent an	y the public which is to file (and 2 minutes to complete, includir comments on the amount of ti d Trademark Office, U.S. Dep	d by the USPTO to proc ng gathering, preparing, me you require to comp artment of Commerce, P	

13-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 14 Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/602,315	06/24/2003	Kie Y. Ahn	1303.107US1	9051	
7	590 12/10/2004	EXAMINER			
Schwegman, Lur Attn: David R. Coo	ndberg, Woessner &	SARKAR, ASOK K			
P.O. Box 2938	uran		ART UNIT	PAPER NUMBER	
Minneapolis, MN	55402		2829		
			DATE MAILED: 12/10/2004		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after t mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a ha months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date th determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retriev (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.